

*P/M  
Cont.*

the spindle motor shown in Fig. 2 is not for ZIP, the disk putting face 1a of the rotor 1 is not provided with the magnet 1d to function as a disk clamper. Further, the parts or portions identical with or relevant to the ones in Fig. 1 are indicated identically.

IN THE CLAIMS:

Please cancel claims 1-8 without prejudice to or disclaimer of the subject matter contained therein.

Please add claims 9-23 as follows:

*SUB E1*

--9. A spindle motor for a disk driving device, comprising:  
a housing having a cylindrical projection portion formed integrally with the housing;

*Df*

a stator comprising a stack and coils wound around the stack, the stator mounted on an outer circumference of the cylindrical projection portion of the housing to confront a magnet;

a lead wire of the coils connected to an electric supplying connector portion;  
a rotor having a central hole and a downwardly depending flange at an outer periphery thereof, the rotor supported rotatably relative to the housing by a bearing means, the magnet disposed on an inner peripheral surface of the downwardly depending flange of the rotor; and

a shaft fitted in the central hole of the rotor, wherein the bearing means is a pair of ball bearings, the ball bearings are disposed in the cylindrical projection portion of the housing with a spacer disposed between the bearings and the housing and the rotor are made of a super engineering plastic material and are unitarily formed by injection molding. --

--10. A spindle motor for a disk driving device according to claim 9, wherein the super engineering plastic material is selected from liquid crystal polymer(LCP), polyphenylene sulfide(PPS), polythersulfon(PES) and polysulfon(PSF).--

--11. A spindle motor for a disk driving device according to claim 9, wherein the spacer is formed integrally with said housing.--

--12. A spindle motor for a disk driving device according to claim 9, wherein the lead wire is connected to the electric supplying connector portion through a through-hole formed in the housing.--

--13. A spindle motor for a disk driving device according to claim 9, wherein the electric supplying connector portion is molded with the housing in a unitary manner.--

--14. A spindle motor for a disk driving device according to claim 9, wherein the lead wire is connected to a flexible printed circuit board (FPC).--

--15. A spindle motor for a disk driving device according to claim 9, wherein the magnet is a rubber magnet.--

--16. A spindle motor for a disk driving device according to claim 9, wherein the spindle motor is for a removal type of disk drive (ZIP).--

--17. A spindle motor for a disk driving device, comprising:  
a housing having an annular hole and a cylindrical projection portion formed integrally with the housing;

a stator comprising a stack and coils wound around the stack, the stator is mounted on an outer circumference of the cylindrical projection portion of the housing to confront a magnet;

a lead wire of the coils is connected to an electric supplying connector portion;  
and

a rotor having a central hole and a downwardly depending flange at an outer periphery thereof, the magnet is disposed on an inner peripheral surface of the downwardly depending flange of the rotor, the rotor supported rotatably relative to the housing by a bearing means, the bearing means is a double row ball bearing and comprising a sleeve outer

ring, a plurality of first balls, a plurality of second balls, an inner ring and a shaft, the sleeve outer ring having a pair of outer raceway grooves on an inner circumference surface of the sleeve outer ring, the shaft having a small diameter portion and a large diameter portion with an inner raceway groove on the outer circumference surface of the large diameter portion, the inner ring is fixed on the small diameter portion of the shaft, the first balls are disposed between one outer raceway groove of the sleeve outer ring and an inner raceway groove formed on an outer circumference surface of the inner ring, the second balls are disposed between another outer raceway groove of the sleeve outer ring and the inner raceway groove of the large diameter portion of the shaft, wherein the large diameter portion of the shaft is fitted in the annular hole of the housing, the sleeve outer ring is fitted in the central hole of the rotor, one end portion of the sleeve outer ring being located in the cylindrical projection portion and the housing and rotor are made of a super engineering plastic material and are unitarily formed by injection molding.--

*Df Cont*

--18. A spindle motor for a disk driving device according to claim 17, wherein the super engineering plastic material is selected from liquid crystal polymer(LCP), polyphenylene sulfide(PPS), polythersulfon(PES) and polysulfon(PSF).--

--19. A spindle motor for a disk driving device according to claim 17, wherein the lead wire is connected to the electric supplying connector portion through a through-hole formed in the housing.--

--20. A spindle motor for a disk driving device according to claim 17, wherein the electric supplying connector portion is molded with the housing in a unitary manner.--

--21. A spindle motor for a disk driving device according to claim 17, wherein the lead wire is connected to a flexible printed circuit board (FPC).--

--22. A spindle motor for a disk driving device according to claim 17, wherein the magnet is a rubber magnet.--